

Date: Monday, 1/8/2007 10:36:42 AM
 User: Kim Johnston

Process Sheet

| | |
|--|--|
| Customer : CU-DAR001 Dart Helicopters Services | Drawing Name : 350 SKIDTUBE ASSEMBLY LH |
| Job Number : 30120 | |
| Estimate Number : 10266 | |
| P.O. Number : N/A | Part Number : D350636013 |
| This Issue : 1/8/2007 | Drawing Number : D2750 REV D |
| Prsht Rev. : NC | Project Number : N/A |
| First Issue : N/A | Drawing Revision : D |
| Previous Run : 29755 | Material : N/A |
| Written By : <u>JS 07.01.08</u> | Due Date : 2/2/2007 |
| Checked & Approved By : <u>JS 07.01.08</u> | Qty: 1 Um: Each |
| Comment : Est Rev: H 02.09.25 Rearranged procedure steps KJ est rev I 06.03.30 Per rev. D dwg EC | |

Additional Product

Job Number:



| | | |
|----------------|------------------------------|----------------------|
| Seq. #: | Machine Or Operation: | Description : |
|----------------|------------------------------|----------------------|

| | | |
|-----|----|------------------|
| 1.0 | DC | DOCUMENT CONTROL |
|-----|----|------------------|

**Comment:** DOCUMENT CONTROL

Photocopy blue file and type labels per PPP D350-636-013 CHG 002

JS 07.01.18

| | | |
|-----|------------|----------------|
| 2.0 | D26003BENT | Extrusion Bent |
|-----|------------|----------------|

**Comment:** Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2600-3-Bent

Extrusion (Bent)

B29337

| | | |
|-----|-------|---------|
| 3.0 | D2744 | Fwd Cap |
|-----|-------|---------|

**Comment:** Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Cap

Batch:

B27559

DE 07-02-28

| | | |
|-----|----------------|-------------------------|
| 4.0 | LANDING GEAR 1 | LANDING GEAR RESOURCE 1 |
|-----|----------------|-------------------------|

**Comment:** LANDING GEAR RESOURCE 1

1- Mark cut line on aft end of D2600-3-Bent using Jig DT 8150. Cut to length as per Dwg D2750. Deburr end

JS 07-02-28

2-Drill pilot holes as per Dwg D2750 sheet 3 (D2750-1 details). Drill using drill Jig DT8150 & DT8864 drilling holes labelled "B" only.

JS 07-02-28

3- Mark fwd end for cutting using Drill Jig DT 8150 & DT8864 and cut as per dwg D2750.

JS 07-02-28

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☐ DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Date: Monday, 1/8/2007 10:36:43 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 30120

Part Number: D350636013

Job Number:



Seq. #:

Machine Or Operation:

Description:

4-Drill pilot holes for Detail B using DT8330

Per 1/M 07-02-28

5-Open float holes to .375"

Per 1/M 02-02-28

6-Drill pilot holes for wearplates as per Dwg D2750 using DT8108 and open to 0.250" ***Make sure that wearplate holes are on bottom of tube*****

Per 1/M 07-02-28

7-Open up holes of Detail A to 0.250" (total of 2 holes per side)

Per 1/M 07-02-28

8- Countersink all fwd wearshoe holes (total of 19 holes per side) DO NOT C'SINK THE LAST AFT HOLES (total of 2 per side for blade fitting) as per dwg D2750.

Per 1/M 07-02-28

9-Countersink Detail A as per dwg D2750.

BE 07-03-01

10-Open up holes for Detail B, "hole size W" and blade fitting location holes to 0.500" (total of 9 holes per side) as per dwg D2750.

BE 1/M 07-03-01

11-Weld D2744 Cap as per Dwg D2750 and QSI 004 Fill grooves in bend left from bending as per QSI 004 A/R Aluminum Rod

M102756 BE 07-02-28

12-Grind welds flush as per Dwg D2750

BE 07-03-01

5.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

07/03/01 ①

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

07/03/01 ①

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

Per 07-03-01 ①

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

BE 07-03-01

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|--------------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Date: Monday, 1/8/2007 10:36:43 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 30120

Part Number: D350636013

Job Number:



Seq. #:

Machine Or Operation:

Description :

9.0

D2739

350 I Beam



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Web

Batch:

B29041 Pm 07-03-02(1)

10.0

D34901

CROSS BOLT SPACER



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Crossbolt spacer

Batch:

B29981 BE 07-03-05

PTO

11.0

D34905

CROSS BOLT SPACER



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Crossbolt spacer

Batch:

B29870 BE 07-03-05

12.0

D2743

Crossbolt Spacer



Comment: Qty.: 8.0000 Each(s)/Unit Total: 8.0000 Each(s)

Crossbolt Spacer

Batch:

B29342 BE 07-03-05

PTO

13.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open up holes "size X" (total of 4 holes per side) as per dwg D2750 Pm 07-03-02(1)

2-Open up holes of Detail V & Detail C to 0.625" (total of 8 holes per side) Pm 07-03-02(1)
as per dwg D2750.

3-Chamfer holes of Detail V, Detail C, hole size "W" and "X" per dwg D2750 (welding instructions on sheet 5) Pm 07-03-02(1)

4-Deburr and blow out all chips from inside of tube Pm 07-03-02(1)

5-Bond web D2739 in place as per QSI 015

A/R

Sikaflex-291

batch:

M103497

exp. date: 07-10-01

Pm 07-03-02(1)

6- Weld spacers D3490-1, D3490-5 and D2743 as per dwg D2750 & QSI004

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|---|----|----------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | D 3490-1 B 29981-1 EXTRA CROSS BOLT SPACER D 2743 B 29342-1 EXTRA CROSS BOLT SPACER REQUIRED FOR WELDTEST. | BE | 07-03-05 | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Date: Monday, 1/8/2007 10:36:43 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 30120

Part Number: D350636013

Job Number:



Seq. #:

Machine Or Operation:

Description :

(welding instructions on sheet 5)

A/R

Aluminum Rod

batch: M102756 BE 07-03-05

7-Grind welds flush as per Dwg D2750 ~~for 07-10~~ for 07-03-05(1)

8-Spot face ground handling holes section J-J (total of 4 places per side) as per dwg D2750 for 07-03-05(1)

9-Deburr holes for 07-03-05(1)

14.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

M 07/03/06

15.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

M 07/03/06

16.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Gloss White (Ref. 4.3.5.1) as per Dart QSI 005 4.3

a.m 07/03/19 (1)

17.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

Inspect for foreign object per QSI 024

m-l 07/03/20

18.0

NAS1330S3KB166

INSERT



Comment: Qty.: 42.0000 Each(s)/Unit Total : 42.0000 Each(s)

INSERT

Batch: m103472

19.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install inserts as per dwg D2750

FD/a.m 07/03/20 (1)

Dart Aerospace Ltd

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Date: Monday, 1/8/2007 10:36:43 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 30120

Part Number: D350636013

Job Number:



Seq. #:

Machine Or Operation:

Description :

20.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT INSERTS

07/03/2007

21.0

D26483

Wearpad



Comment: Qty.: 5.0000 Each(s)/Unit Total : 5.0000 Each(s)

Wearpad

Batch: *B29777*

22.0

D265613

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Wearplate

Batch: *B29976*

23.0

D265635

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Wearplate

Batch: *B29387*

24.0

D2746

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Wearplate

Batch: *B29012*

25.0

D2745

Bushing



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Bushing

Batch: *B29437*

26.0

D3488041

BLADE FITTING ASSEMBLY, LH



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Blade Fitting, LH

Batch: *B30111*

FD/a.m

07/03/2007 ①

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Date: Monday, 1/8/2007 10:36:44 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 30120

Part Number: D350636013

Job Number:



| Seq. #: | Machine Or Operation: | Description : |
|---------|-----------------------|---------------|
|---------|-----------------------|---------------|

| | | |
|------|----------|---------------|
| 27.0 | D3492041 | PLUG ASSEMBLY |
|------|----------|---------------|



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

PLUG ASSEMBLY

Batch: 0529797

| | | |
|------|----------|---------------|
| 28.0 | D3492045 | PLUG ASSEMBLY |
|------|----------|---------------|



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

PLUG ASSEMBLY

Batch: 0530132

| | | |
|------|--------|------|
| 29.0 | AN3C5A | Bolt |
|------|--------|------|



Comment: Qty.: 38.0000 Each(s)/Unit Total : 38.0000 Each(s)

Bolt

Batch: M103641

| | | |
|------|--------|------|
| 30.0 | AN3C6A | BOLT |
|------|--------|------|



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Bolt

Batch: M104118

| | | |
|------|--------|------|
| 31.0 | AN3C7A | BOLT |
|------|--------|------|



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

BOLT

Batch: M102254

| | | |
|------|---------|------|
| 32.0 | AN6C44A | BOLT |
|------|---------|------|



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

BOLT

Batch: M103361

| | | |
|------|---------|------|
| 33.0 | AN8C35A | BOLT |
|------|---------|------|



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

BOLT

Batch: M102180

FL/am 07/03/20 ①

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Date: Monday, 1/8/2007 10:36:44 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 30120

Part Number: D350636013

Job Number:



| Seq. #: | Machine Or Operation: | Description : |
|---------|-----------------------|---------------|
|---------|-----------------------|---------------|

| | | |
|------|-----------|--------|
| 34.0 | AN960C10L | washer |
|------|-----------|--------|



Comment: Qty.: 46.0000 Each(s)/Unit Total : 46.0000 Each(s)
washer
Batch: m 101692

| | | |
|------|------------|--------|
| 35.0 | AN960C816L | WASHER |
|------|------------|--------|



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)
WASHER
Batch: m 100186

| | | |
|------|----------|-----|
| 36.0 | MS210436 | NUT |
|------|----------|-----|



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)
NUT
Batch: m 102582

| | | |
|------|-----------|-----|
| 37.0 | MS21083C8 | NUT |
|------|-----------|-----|



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
NUT
Batch: m 103492

| | | |
|------|------------|--------|
| 38.0 | NAS1515H3L | WASHER |
|------|------------|--------|



Comment: Qty.: 46.0000 Each(s)/Unit Total : 46.0000 Each(s)
WASHER
Batch: m 103641

| | | |
|------|------------|--------|
| 39.0 | NAS1515H8L | WASHER |
|------|------------|--------|



Comment: Qty.: 10.0000 Each(s)/Unit Total : 10.0000 Each(s)
WASHER
Batch: m 102515

| | | |
|------|-----------------|----------------------------|
| 40.0 | HAND FINISHING1 | HAND FINISHING RESOURCE #1 |
|------|-----------------|----------------------------|



Comment: HAND FINISHING RESOURCE #1

1-Spray inside of tube with "LPS-3" batch: m 103581
Inspect for foreign objects as Dart QSI 024

F&A

07/03/20 ①

F&A

07/03/20 ①

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Date: Monday, 1/8/2007 10:36:44 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 30120

Part Number: D350636013

Job Number:



Seq. #:

Machine Or Operation:

Description :

2-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D2750

SIKA FLEX 241

BATCH: m103497

EXP DATE: 07/10

3-Coat all exposed fasteners with "LPS Procyon"

batch: m17168

FL/AM 07/03/2007

41.0

QC5

INSPECT WORK TO CURRENT STEP



Inspect



Comment: INSPECT WORK TO CURRENT STEP

42.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

43.0

D2741

Blade



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Blade

Batch: B29868 ✓

44.0

AN960C816L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Washer

Batch: m100186 ✓

45.0

MS21083C8

NUT



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Nut

Batch: m100983 ✓

46.0

AN8C21A

BOLT



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Bolt

Batch: m103549 ✓

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ ☐ Date: 07/13/23
 QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Date: Monday, 1/8/2007 10:36:44 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 30120

Part Number: D350636013

Job Number:



Seq. #:

Machine Or Operation:

Description :

47.0

NAS1515H8L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

WASHER

Batch: M102515

48.0

D34931

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

WASHER

Batch: B29798

49.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

50.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Package as per PPP D350-636-013

51.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



U 07-03-23

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries



RELEASED
06-02-07

| | | | |
|-------------------------------|--------------------------------|---|------------------------|
| DESIGN <i>P/H</i> | DRAWN BY <i>P/H</i> | DART AEROSPACE USA, INC. PORT HADLOCK, WA | |
| CHECKED <i>[Signature]</i> | APPROVED <i>[Signature]</i> | DRAWING NO. D2750 | REV. D SHEET 1 OF 5 |
| DATE 06.01.05 | | TITLE 350 SKIDTUBE ASSEMBLY | SCALE NTS |
| A | 98.04.16 | NEW ISSUE | |
| B | 98.09.01 | CHANGE MS24694-S293 TO AN8-16A | |
| C | 98.11.18 | ADD D2750-3/D2750-4 INCORPORATE D2738 AND D2740 | |
| D | 06.01.05 | ADD HOLES AND SPACERS FOR APICAL FLOATS INCORPORATE DEO 9133/9157 | |

| Qty -041 | Qty -042 | Qty -043 | Qty -044 | Part Number | Description |
|-------------|-------------|-------------|-------------|----------------|-----------------------|
| X | | | | D2750-041 | SKIDTUBE ASSEMBLY, LH |
| | X | | | D2750-042 | SKIDTUBE ASSEMBLY, RH |
| | | X | | D2750-043 | SKIDTUBE ASSEMBLY, LH |
| | | | X | D2750-044 | SKIDTUBE ASSEMBLY, RH |
| 5 | 5 | 5 | 5 | D2648-3 | WEARPAD |
| 1 | 1 | 1 | 1 | D2656-13 | WEARSHOE |
| 1 | 1 | 1 | 1 | D2656-35 | WEARSHOE |
| 1 | 1 | 1 | 1 | D2746 | WEARSHOE |
| 1 | 1 | 1 | 1 | D2739 | WEB |
| 1 | 1 | 1 | 1 | D2741 | BLADE |
| 8 | 8 | 8 | 8 | D2743 | SPACER |
| 1 | 1 | 1 | 1 | D2744 | CAP |
| 8 | 8 | 8 | 8 | D2745 | BUSHING |
| 1 | | | | D2750-1 | SKIDTUBE WELDMENT, LH |
| | 1 | | | D2750-2 | SKIDTUBE WELDMENT, RH |
| | | 1 | | D2750-3 | SKIDTUBE WELDMENT, LH |
| | | | 1 | D2750-4 | SKIDTUBE WELDMENT, RH |
| 1 | | 1 | | D3488-041 | BLADE FITTING, LH |
| | 1 | | 1 | D3488-042 | BLADE FITTING, RH |
| 4 | 4 | 4 | 4 | D3490-1 | SPACER |
| 4 | 4 | | | D3490-3 | SPACER |
| | | 4 | 4 | D3490-5 | SPACER |
| 8 | 8 | 8 | 8 | D3492-041 | PLUG ASSEMBLY |
| 8 | 8 | | | D3492-043 | PLUG ASSEMBLY |
| | | 8 | 8 | D3492-045 | PLUG ASSEMBLY |
| 38 | 38 | 38 | 38 | AN3C5A | BOLT |
| 4 | 4 | 4 | 4 | AN3C6A | BOLT |
| 4 | 4 | 4 | 4 | AN3C7A | BOLT |
| 4 | 4 | 4 | 4 | AN6C44A | BOLT |
| 2 | 2 | 2 | 2 | AN8C21A | BOLT |
| 1 | 1 | 1 | 1 | AN8C35A | BOLT |
| 46 | 46 | 46 | 46 | AN960C10L | WASHER |
| 4 | 4 | 4 | 4 | AN960C816L | WASHER |
| 4 | 4 | 4 | 4 | MS21043-6 | NUT |
| 3 | 3 | 3 | 3 | MS21083C8 | NUT |
| 42 | 42 | 42 | 42 | NAS1330S3KB166 | INSERT |
| 46 | 46 | 46 | 46 | NAS1515H3L | WASHER |
| 12 | 12 | 12 | 12 | NAS1515H8L | WASHER |

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 20120

Copyright © 1998 by DART AEROSPACE USA, INC.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.



| | | | |
|------------------|----------------|--|------------------------|
| DESIGN PH | DRAWN BY PH | DART AEROSPACE USA, INC. PORT HADLOCK, WA | |
| CHECKED PH | APPROVED PH | DRAWING NO. D2750 | REV. D SHEET 2 OF 5 |
| DATE 06.01.05 | | TITLE 350 SKIDTUBE ASSEMBLY | SCALE NTS |

RELEASED
06.02.07

GENERAL NOTES:

1. ALL DIMENSIONS ARE IN INCHES
2. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
3. MAKE FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
4. DAMAGE TOLERANCE ON BENDING:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 12 INCHES ABOVE THE GROUND. NO GOUGING IS ACCEPTABLE IN THE FLAT PORTION OF THE TUBE. GOUGES UP TO 0.020 ARE ACCEPTABLE IN THE BENT PORTION OF THE TUBE. TUBE O.D. SHOULD BE 3.150 ± 0.010 IN THE FLAT PORTION OF THE TUBE. TUBE O.D. SHOULD BE 3.15 ± 0.030 IN THE BENT PORTION OF THE TUBE.
5. ALL HOLES DRILLED ON CENTERLINES EXCEPT THOSE NOTED BY SECTIONS E-E, F-F, AND R-R.
6. WELDING TO BE DONE PER DART QSI 004.
7. FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 ksi
MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi
8. FINISH:
ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
9. INSTALL NAS1330S3KB166 INSERTS AFTER FINISH AS INDICATED IN D2750-1/-2/-3/-4 WELDING DETAIL ON PAGE 4 AND 5. DRILL 'E' SIZE HOLES ($\emptyset 0.250$ - $\emptyset 0.257$) FOR WEARSHOE INSERTS. C'SINK $\emptyset 0.391 \times 100^\circ$ AND INSTALL INSERTS
10. D3488-041 (OR D3488-042) BLADE FITTING AND AN3-5A/AN3-7A WEARSHOE SCREWS TO BE INSTALLED USING SIKAFLEX-241 (OR EQUIVALENT) SEALANT.
11. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
12. APPLY A LAYER OF SIKAFLEX -241/-291 ADHESIVE BETWEEN THE BOTTOM OF THE SKIDTUBE ASSEMBLY AND THE WEARPLATES

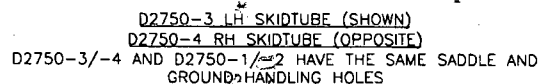
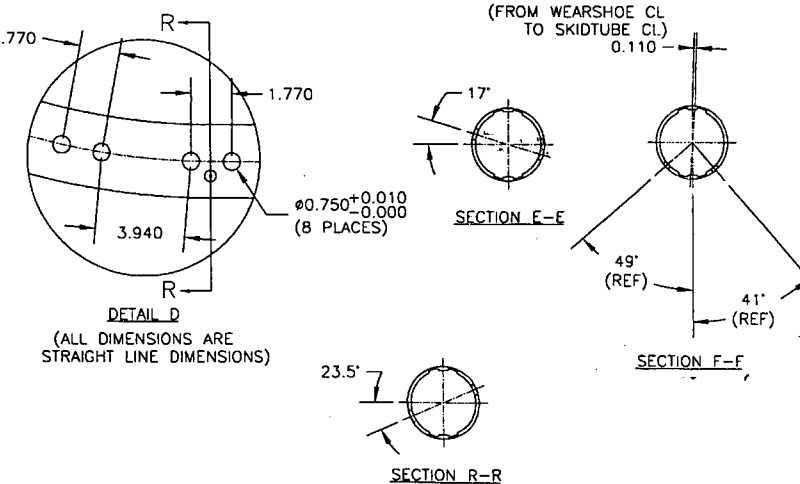
SHOP COPY
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 30120

Copyright © 1998 by DART AEROSPACE USA, INC.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.



02.02.07 #



THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL
AND IS SUPPLIED ON THE EXPRESS CONDITION
THAT IT IS NOT TO BE USED FOR ANY PURPOSE
OR COPIED OR COMMUNICATED TO ANY OTHER
PERSON WITHOUT WRITTEN PERMISSION FROM
DART AEROSPACE USA, INC.

| | |
|---------------------|----------------------|
| DESIGN PH | DRAWN BY PH |
| CHECKED [Signature] | APPROVED [Signature] |
| DATE 06.01.05 | |

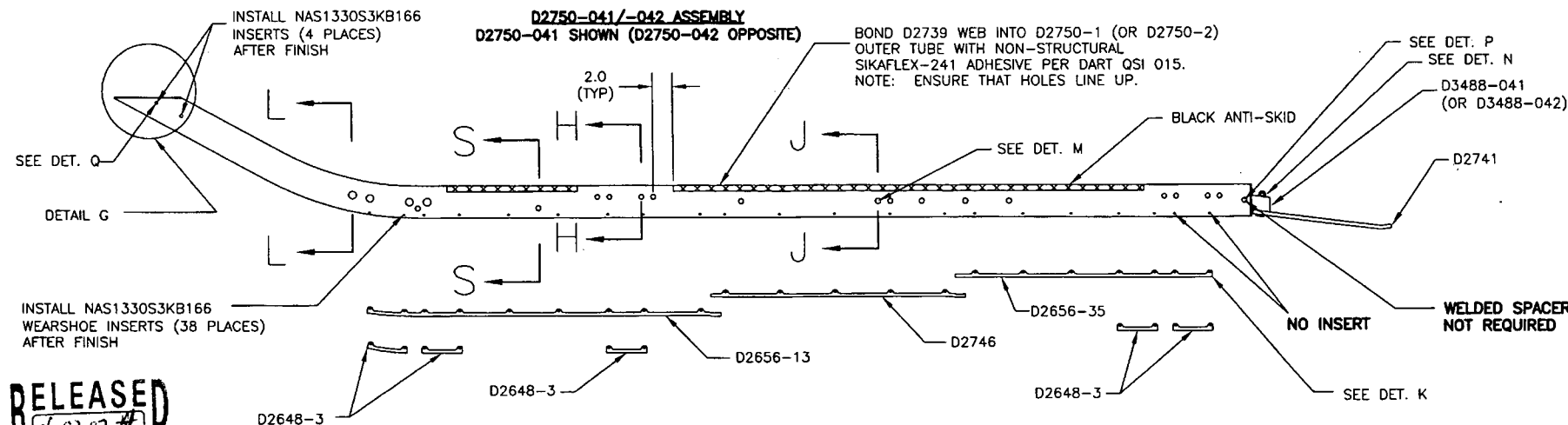
| | | | |
|--------------------------------|--|---|--|
| DART | | DART AEROSPACE USA, INC. PORT HADLOCK, WA | |
| DRAWING NO. D2750 | | REV. D SHEET 3 OF 5 | |
| TITLE 350 SKIDTUBE ASSEMBLY | | SCALE 1:20 | |

SHOP COPY
RETURN TO
ENGINEERING
CONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 30120

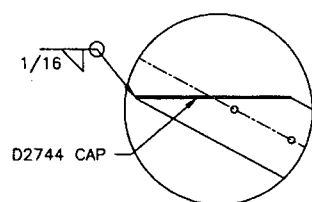
RELEASED
06-0207

D2750-041/-042 ASSEMBLY
D2750-041 SHOWN (D2750-042 OPPOSITE)

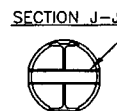
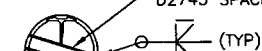
BOND D2739 WEB INTO D2750-1 (OR D2750-2)
OUTER TUBE WITH NON-STRUCTURAL
SIKAFLEX-241 ADHESIVE PER DART QSI 015.
NOTE: ENSURE THAT HOLES LINE UP.



DETAIL G



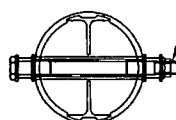
SECTION H-H



WELDING INSTRUCTIONS

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2743 SPACER
3. WELD INTO PLACE
4. GRIND FLUSH
5. DRILL OUT SPACER TO Ø0.484
6. SPOT FACE Ø0.750 (SECTION J-J ONLY)

DETAIL M



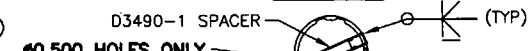
- AN6-44A BOLT (1)
D2745 BUSHING (2)
NAS1515H8L WASHER (2)
MS21043-6 NUT (1)
(4 PLACES)
NOTE: INSTALL WASHER BETWEEN
SKIDTUBE AND BUSHING

SECTION L-L



D3492-043 PLUG ASSEMBLY

SECTION S-S

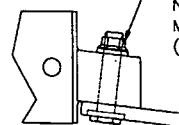


D3492-041 PLUG ASSEMBLY

WELDING INSTRUCTIONS

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D3490-1 SPACER (4 PLACES) INTO Ø0.500 HOLES OR INSERT D3490-3 SPACER (4 PLACES) INTO Ø0.750 HOLES
3. WELD INTO PLACE
4. GRIND FLUSH
5. INSERT D3492-041 PLUG ASSEMBLY (8 PLACES) INTO D3490-1 SPACER OR INSERT D3492-043 PLUG ASSEMBLY (8 PLACES) INTO D3490-3 SPACER ON BOTH ENDS

DETAIL N



- AN8C21A BOLT (1)
AN960JD816L WASHER (1)
NAS1515H8L WASHER (1)
MS21083CB NUT (1)
(2 PLACES)

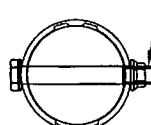
DETAIL K



USE AN3C7A BOLTS
FOR INSTALLING AFT
D2648-3 WEARPAD
(4 PLACES)

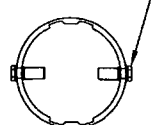
- AN3C5A BOLT (1)
AN960JD10L WASHER (1)
NAS1515H3L WASHER (1)
(38 PLACES)

DETAIL P



- AN8C35A BOLT (1)
AN960C816L WASHER (2)
NAS1515H8L WASHER (2)
MS21083CB NUT (1)

DETAIL Q



- AN3C6A BOLT (1)
AN960C10L WASHER (1)
NAS1515H8L WASHER (1)
(4 PLACES)

COPYRIGHT © 1996 BY DART AEROSPACE USA, INC.

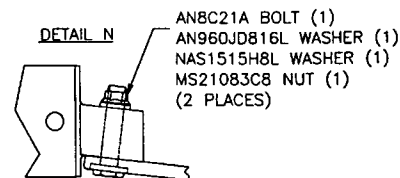
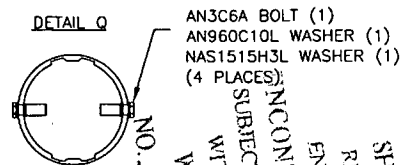
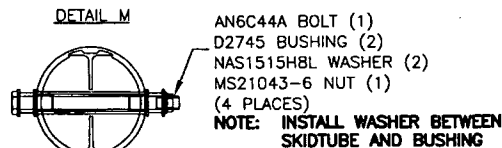
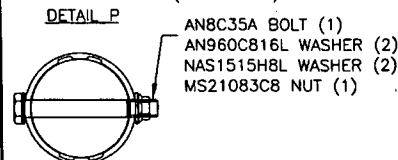
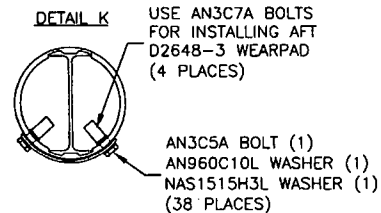
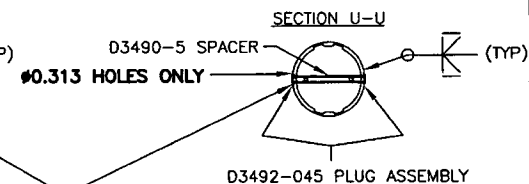
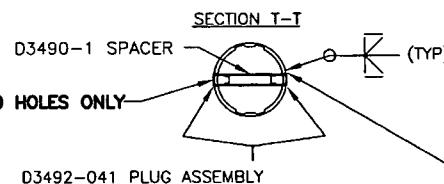
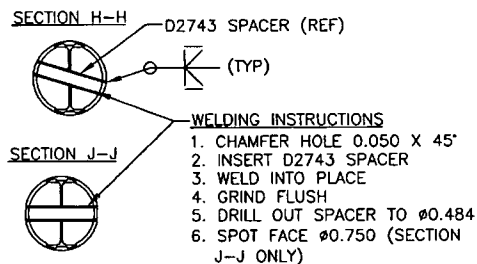
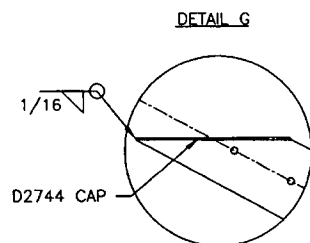
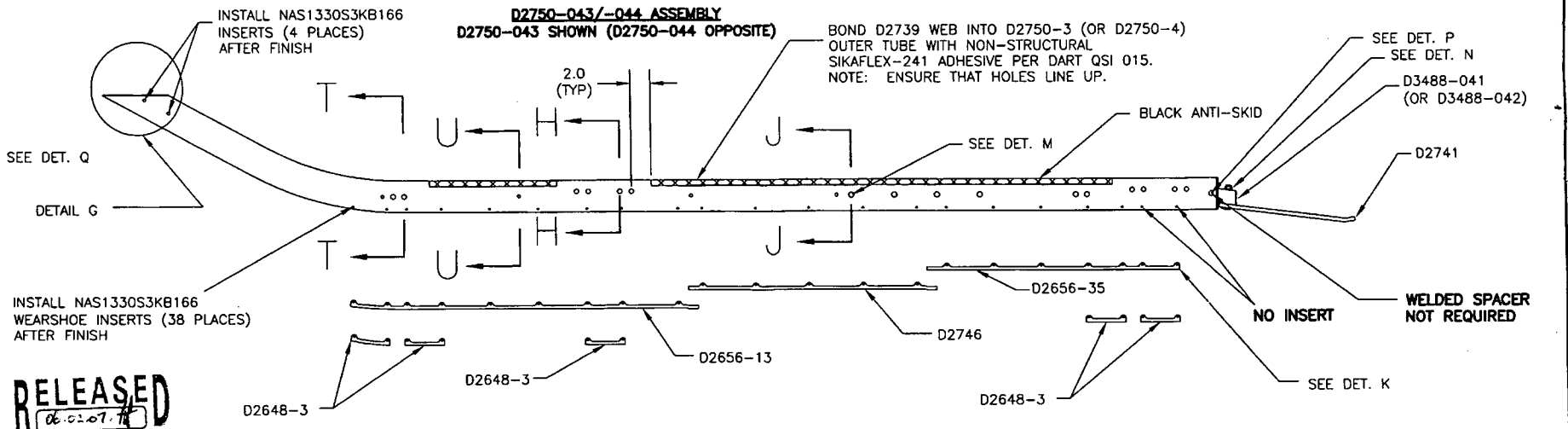
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL
AND IS SUPPLIED ON THE EXPRESS CONDITION
THAT IT IS NOT TO BE USED FOR ANY PURPOSE
OR COPIED OR COMMUNICATED TO ANY OTHER
PERSON WITHOUT WRITTEN PERMISSION FROM
DART AEROSPACE USA, INC.

DESIGN
CHECKED
DATE
06.01.05

DRAWN BY
APPROVED
TITLE
350 SKIDTUBE ASSEMBLY

DART DART AEROSPACE USA, INC.
PORT HADLOCK, WA
REV. 0
D2750
SHEET 4 OF 5
SCALE
1:20

SHOP COPY
RETURN TO
ENGINEERING
CONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 20120



WELDING INSTRUCTIONS

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D3490-5 SPACER (4 PLACES) INTO Ø0.313 HOLES OR INSERT D3490-1 SPACER (4 PLACES) INTO Ø0.500 HOLES
3. WELD INTO PLACE
4. GRIND FLUSH
5. INSERT D3492-045 PLUG ASSEMBLY (8 PLACES) INTO D3490-5 SPACER OR INSERT D3492-041 PLUG ASSEMBLY (8 PLACES) INTO D3490-1 SPACER ON BOTH ENDS

| | | | | | |
|--|--------------------|--------------------------------|--------------------|--|--|
| COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. | | DESIGN PH | DRAWN BY PH | DART DART AEROSPACE USA, INC. PORT HADLOCK, WA | |
| CHECKED PH | APPROVED PH | DRAWING NO. D2750 | | REV. D SHEET 5 OF 5 | |
| DATE 06.01.05 | | TITLE 350 SKIDTUBE ASSEMBLY | | SCALE 1:20 | |

NO
 WORK ORDER
 30120
 SUBJECT TO AMENDMENT
 WITHOUT NOTICE
 UNCONTROLLED COPY
 RETURN TO
 ENGINEERING
 SHOP COPY

NO. 96

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name Barclay Elliott
Joint Welding Procedure Tig
Part number and Job number B350636013 / B30120

TEST WELDS REQUIRED

BASE METAL Alum WELDING PROCESS Tig
Penetration Complete ☐ Partial ☒ Single Weld ☒ Double Weld ☐
Current AC ☒ DC ☐ Backing YES ☐ NO ☒

| | Position | Vertical | Down <input type="checkbox"/> | Up <input type="checkbox"/> |
|--------------|-----------------------------|-----------------------------|-------------------------------|-----------------------------|
| Sheet Groove | 1G <input type="checkbox"/> | 2G <input type="checkbox"/> | 3G <input type="checkbox"/> | 4G <input type="checkbox"/> |
| Tube Groove | 1G <input type="checkbox"/> | 2G <input type="checkbox"/> | 5G <input type="checkbox"/> | 6G <input type="checkbox"/> |
| Sheet Fillet | 1F <input type="checkbox"/> | 2F <input type="checkbox"/> | 3F <input type="checkbox"/> | 4F <input type="checkbox"/> |
| Tube Fillet | 1F <input type="checkbox"/> | 2F <input type="checkbox"/> | 4F <input type="checkbox"/> | 5F <input type="checkbox"/> |

Crossbolt Spacer Welded into Skidtube

TEST RESULTS

Visual Pass ☒ Fail ☐
Penetration Pass ☒ Fail ☐
Crossbolt Spacer Pass ☒ Fail ☐

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

Date of Test Coupon 07/03/05 Qualifier David Naval